

/H/L/E 1 ATGACACCGACGACGACGACCGCGGAACTCACG 33
 /H/L/E 34 ACGGAGTTTGACTACGACGATGAAGCGACTCCC 65
 /H/L/E 67 TGTGTCCTCACCGACGTGCTTAATCAGTCGAAG 90
 /H/L/E 100 CCAGTCACGTTGTTTCTGTACGGCGTTGTCTTT 132
 /H/L/E 133 CTCTTCGGTTCCATCGGCAACTTCTTGGTGATC 165
 /H/L/E 166 TTCACCATCACCTGGCGACGTCCGATTCAATGT 198
 /H/L/E 199 TCCGGCGATGTTTACTTTATCAACCTCGCGGCC 231
 /H/L/E 232 GCCGATTTGCTTTTCGTTTGTACACTACCTCTG 264
 /H/L/E 265 TGGATGCAATACCTCCTAGATCACAACCTCCCTA 297
 /H/L/E 298 GCCAGCGTGCCGTGTACGTTACTCACTGCCTGT 330
 /H/L/E 331 TTCTACGTGGCTATGTTTGCCAGTTTGTGTTTT 363
 /H/L/E 364 ATCACGGAGATTGCACTCGATCGCTACTACGCT 396
 /H/L/E 397 ATTGTTTACATGAGATATCGGCCTGTAAAACAG 429
 /H/L/E 430 GCCTGCCTTTTCAGTATTTTTTGGTGGATCTTT 462
 /H/L/E 463 GCCGTGATCATCGCCATTCCACACTTTATGGTG 495
 /H/L/E 496 GTGACCAAAAAAGACAATCAATGTATGACCGAC 528
 /H/L/E 529 TACGACTACTTAGAGGTCAGTTACCCGATCATC 561
 /H/L/E 562 CTCAACGTAGAACTCATGCTCGGTGCTTTTCGTG 594
 /H/L/E 595 ATCCCGCTCAGTGTGATCAGCTACTGCTACTAC 627
 /H/L/E 628 CGCATTTCAGAAATCGTTGCGGTGTCTCAGTCG 660
 /H/L/E 661 CGCCACAAAGGCCGCATTGTACGGGTACTTATA 693
 /H/L/E 694 GCGGTCGTGCTTGTCTTTATCATCTTTTGGCTG 726
 /H/L/E 727 CCGTACCACCTGACGCTGTTTGTGGACACGTTG 759
 /H/L/E 760 AACTGCTCAAATGGATCTCCAGCAGCTGCGAG 792
 /H/L/E 793 TTCGAAAAATCACTCAAGCGCGCGCTCATCTTG 825
 /H/L/E 826 ACCGAGTCACTCGCCTTTTGTCACTGTTGTCTC 858
 /H/L/E 859 AATCCGCTGCTGTACGTCTTCGTGGGCACCAAG 891
 /H/L/E 892 TTTCCGGCAAGAACTGCACTGTCTGCTGGCCGAG 924
 /H/L/E 925 TTTCCGCCAGCGACTGTTTTCCCGCGATGTATCC 957
 /H/L/E 958 TGGTACCACAGCATGAGCTTTTCGCGTCGGAGC 990
 /H/L/E 991 TCGCCGAGCCGAAGAGAGACGTCTTCCGACACG 1023
 /H/L/E 1024 CTGTCCGACGAGGCGTGTGCGGTCTCACAAATT 1056
 /H/L/E 1057 ATACCGTAA 1085

Fig. 1A

VHL/E	1	<u>MTPTTTTAELTTEFDYDDEATPCVLT</u> <u>DV</u> <u>LNQSK</u>	33
VHL/E	34	<u>PVTLFLYGVVFLFGS</u> <u>IGNFLVIFTITWRRRIQC</u>	68
VHL/E	67	SGDVYFINLAAADLLFVCTLPLWMOYLLDHNSL	99
VHL/E	100	ASVPCTLLTACFYVAMFASLCFITEIALDRYYA	132
VHL/E	133	IVYMRYRPVKQACLFSEFWWIFAVIIAIPHFMV	165
VHL/E	166	VTKKDNQCMTDYDYLEVSYPIILNVELMLGAFV	198
VHL/E	199	IPLSVISYCYRISRIVAVSQSRHKGRIVRVL	231
VHL/E	232	AVVLVFIIFWLPYHLTLFVDTLKLLKWISSSCE	264
VHL/E	265	FEKSLKRALILTESLAFCHCCLNPLLYVFGTK	297
VHL/E	298	FROELHCLLAEFRORLFSRDVSWYHSMSFSRRS	330
VHL/E	331	SPSRRETSSDTLSDEACRVSQIIP	354

Fig. 1B

human US28	1	M T P T T	5
rhesus US28.1	1	M	1
rhesus US28.2	1	M T N A	4
rhesus US28.3	1	M T N T	4
rhesus US28.4	1		0
rhesus US28.5	1	M T T T T M S A T T N S S T T P Q A S S T T M T T K T S T P G N	32
human US28	8	T T A E L T T	12
rhesus US28.1	2		1
rhesus US28.2	5		4
rhesus US28.3	5		4
rhesus US28.4	1		0
rhesus US28.5	3	T T T G T T T S T L T T I S T T S N A T S I T S N L S T T G N Q T	64
human US28	13		12
rhesus US28.1	2		4
rhesus US28.2	5		8
rhesus US28.3	5		7
rhesus US28.4	1		15
rhesus US28.5	5	A T T N A T T F S S T L T T S T N I S S T F S T V S T V A S N A	96
human US28	13		12
rhesus US28.1	5	S C N	8
rhesus US28.2	7	C H	9
rhesus US28.3	8	T C H	11
rhesus US28.4	6		21
rhesus US28.5	7	T C N S T I T T N I T T A F T T A A N T T A S S L T S I V T S L	128
human US28	13		37
rhesus US28.1	9	N V T L N A S A	23
rhesus US28.2	10	N E S L A S Y G	24
rhesus US28.3	2	N G T F E T F K	25
rhesus US28.4	22		21
rhesus US28.5	29	A T T I E T T S F D Y D E S A E A C N L T D I V H T T R S V T V	160
human US28	38	F L Y G W V F L E G S I G N E	68
rhesus US28.1	24	A M Y S L V I C I G L V G N E L C I V L V K - K R K L R Y S S	54
rhesus US28.2	25	T L Y S I A G I C G V T G N L L C I V L F T - R R I H W F A N	56
rhesus US28.3	27	S A Y T V E V I G L L G N I V L I S V V V - K R K L K F P N	57
rhesus US28.4	22	- Y T C V E L I G I L G H F Y L Y W K N E F F E F S S F S	51
rhesus US28.5	31	T E Y T I F F E G L L G N E - L V E M T I I W N R R I S F M V	191
human US28	69	D V Y F I N L A A D L L F V C T L P L W M Q Y L L D H N S L A	100
rhesus US28.1	55	D V Y F H A S M A D L V S I V M L P L W L H Y V L N F A Q L S	86
rhesus US28.2	56	D I Y Y L N M I F T D F L V I T L P A W V Y L L N Y T Q L S	87
rhesus US28.3	58	D I Y F E N A S L A D V F A C M L P A W V N Y A L D S T Q L S	89
rhesus US28.4	52	D V L F I H L M I T E V F T L T I P V W A Y H L T H G N L P	83
rhesus US28.5	52	E I Y F V N L A I S D L M F V C T L P F W I M Y L L E H D V M S	223
human US28	101	S V P C T L L T A C F Y V A M E A S L C F I T E I A L D R Y Y A	132
rhesus US28.1	87	R G A C I S F S V T F Y V P L F V Q A W L I S I A M E R Y S	117
rhesus US28.2	88	H Y A C I A S F W F Y V S I F I Q A D F M V A V A I E R Y R	118
rhesus US28.3	90	K F S C I T F T F G F Y V S L F I Q A W M I I V T L E R Y G	120
rhesus US28.4	84	G S W C I S L T F V F Y L T V F A R A F F Y L L L I W D R Y S	114
rhesus US28.5	84	H A S C V A M T A I F Y C A L E A S T V F I S I V L D R C Y A	255

FIG. 2 (Page 1 of 2)

human US28.133	L V Y M R Y R R V K Q A C E S I F W W E F A A I	157
rhesus US28.118	N L V W M A P I S V K . . . T A F K H C I G T . . . W E V S A F	143
rhesus US28.219	S L V K N K P L S V K . . . K A S V S C A C I . . . W E V S A F	144
rhesus US28.321	S L V W L A P I T R N . . . K A I A N C V L F . . . W E V S E	148
rhesus US28.415	V I I C B H P L P V N L N Y S Q V I G . . . S V W . . . L V A V	141
rhesus US28.556	L L L G T E K A N R R L L R N A V S G C M I M . . . W G L C F E	284
human US28.158	E A L P H E M V V T K . K D N O C . M T D Y D Y . L E V S Y P I	186
rhesus US28.144	V A S P Y Y A Y R N S H E H E C I L G N Y T W H I N E P L H T	175
rhesus US28.215	V S S P Y Y M F R S O H E T N S C I L G N Y T W H M N S P E R T	178
rhesus US28.317	L A A P Y Y S F R N E H E H O C I M R N Y T W S V G E T W H I	178
rhesus US28.442	S A S P F S I F N G . S V K O C . L G N M G . S I P S E I S S A	170
rhesus US28.555	E A L P H F I E M K K . G T N V C . V A E Y E P G I N N F Y W I	314
human US28.187	I L N V E L M L G A F V I P S V I S Y C Y Y R I S R I V A V S	218
rhesus US28.178	C M D V V I F W T F L A P V L V S I L A S V K M . R R L T W G	208
rhesus US28.277	T M D A S I N I W S F V V P A V T L L I A R R I Y V . C T S G	207
rhesus US28.379	A L D F F I T E T E M P V T I V L A L S F K M A R W S T F G	210
rhesus US28.471	V L N L E V H L C S F W L P L M S A N C Y Y Q A K R R A S P D	202
rhesus US28.515	F I N T E V N L C T E V L P A A A I I Y W Y L K L T K I A L K T H	346
human US28.219	Q S . R H K G R I V R V L A V V E F E W L P Y H L T L F	249
rhesus US28.207	N T . R N E K N S D I L L V M L I V F W G P F N L V L V	237
rhesus US28.218	N K . K M N A R A S G L L E A M V S M E F E G G L F N L N I F	238
rhesus US28.211	Y R . N I T S R T S L I L L E T L V A A G F W G P F H L E M F	241
rhesus US28.433	Q . . L H E L Y R C S L L E T T I T T Y A I V W F P E H L A L E	232
rhesus US28.517	E A L R H R L T S L N I V L A V V E F E W L P Y N L M L M	378
human US28.250	V D T L K I . L K W I S S S C E F E R S L K R A L I L T E S L A	280
rhesus US28.238	R D N I L O R Y V D T L T N C O V E K I K H I M A M I S E A I V	258
rhesus US28.239	R D . I V S D T S E D N K D C T Y L K Q E H F I R M V G V A L V	269
rhesus US28.242	I E N V A G O I Y H I O K D C W Y L Q L R H L C S L M T E T L V	273
rhesus US28.433	F D A L I S . I S H V E P S S A L H W A . . S I V V T C K S F T	281
rhesus US28.579	M Y S L V H . M Q . I P W E C S S E K I L R S L I T E S I A	408
human US28.281	F C H C C L N P L L Y M F V G T K F R Q E L H C L L A E F R Q R	312
rhesus US28.269	Y F R G I T A P I I Y V G I S G R E R E I Y S L F R R O E N	300
rhesus US28.270	Y G R A I F N P F M Y M C V S T L R Q E I K C L F M R I P Y E	301
rhesus US28.274	F L R S V F N P Y I Y M I S Y K E R Q O V R S L L K R T Q Y D	305
rhesus US28.432	F V Y A G I S P L V Y F T C C P T V R R E L L M S L R P F T .	292
rhesus US28.509	L S H C C I N P L I Y L E G P R C B S E F C H L L R C C F T R	440
human US28.313	I F S R D V S W . . Y H S M S F S R R S S P S R R E T S S D T L	342
rhesus US28.301	D L D P D A N Q F M I E L T S O G R E N R A R O S	327
rhesus US28.202	T L D A E H A K L M V N L K N R N A N V P D P I C . .	325
rhesus US28.308	A L D T T Q L A E T M O L K A K G V P V S D P A . .	329
rhesus US28.433 M I S S K E R R G Y A P I K T O P L N I P D E P T I	317
rhesus US28.511	L . C P H R I S W S S I R A E T V S I S L S H S Q V S I A S S E I D	471
human US28.343	S D E V C R V S Q I P	354
rhesus US28.328	E S N Y P Q P E E C F W	339
rhesus US28.228 P R E Y E S V L	333
rhesus US28.390 P H D C E C F L	337
rhesus US28.418	D N K S P H L L N . . E	327
rhesus US28.572	D N D V H D E L O E T I	483

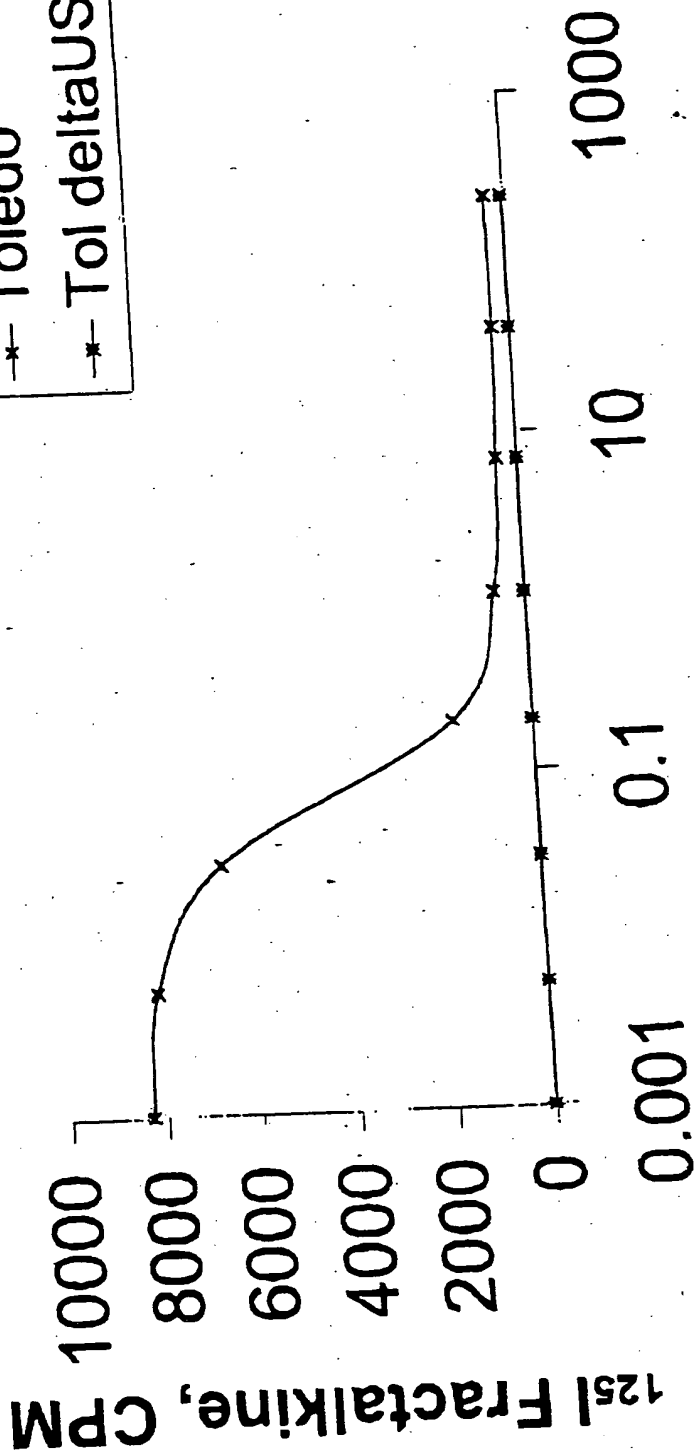
FIG.2 (Page 2 of 2)

human UL78	1	MSPSVEETTSVTESIM	FAIVSFKHMGPFEGY	31
rhesus UL78	1	- - - - -	- - - - -	0
human UL78	32	SMSADRAASDLLIGMFGSVSLV	NLETTGLGC	62
rhesus UL78	1	-MITERVLAGLLAGMTAAGS	LVNLETTGLGC	28
human UL78	63	WVLRVTRP - - PVSVM	IFTWNLVLSQFFSLA	91
rhesus UL78	29	WLNMLDRAGMPMAVGHY	TGNLVLTQVLCIFS	59
human UL78	92	TMLSKGIMLRGALNLS	LCHLVLFVDDVGLYS	122
rhesus UL78	60	-MLASKIVGMTSAANMG	FGGLVLFVDDVGLYS	89
human UL78	123	TALEISRELLILDRLSA	ISYGRDLWHHE - TREN	152
rhesus UL78	90	VTSLFLFMEMI	ILDRMAAFLLNGRLFWRQGLTKQ	120
human UL78	153	AGVALYAVAFAWVLS	LVAAVPTAATGSLDYR	183
rhesus UL78	121	NLSTSVYITLFCWVLGMAAA	AVPSAAVAAPNS	151
human UL78	184	WLGCIPIQYAAVDLT	TKMWFLLGAPMFAVLE	214
rhesus UL78	152	BWERCEIPVSYAAIDM	IVKLEWFWLLLAELVLE	182
human UL78	215	ANVVE LAYSDEIRDP	HVWSYVGRVCTFYVTCLE	245
rhesus UL78	183	MAV I IQSSYHLEIR	RIWYYARRVFMFYTACE	213
human UL78	246	EFVPYYCFRV - - - -	LRGV - LQPASAAAGTG	269
rhesus UL78	214	VMMVPPYYFVRVMLSDF	ALVDIKTKTANS DGC	244
human UL78	270	FGIMDYVELATRTLL	TMLRGIDLPFFFAFFS	300
rhesus UL78	245	DSTFLDYLNMFTHV	IYSFKLVAVFAFFFAFFS	275
human UL78	301	REPTKDLDDSF	FDYLVERCQQSCHGHFVRRLV	331
rhesus UL78	276	SINPMETLEECLE	RADAERQISEASQGERR	306
human UL78	332	QALKRAMYSVELAVCY	FSTSVRDVAEAVKKS	362
rhesus UL78	307	LPINTCCIKLIELIKQY	VSTLSKATRDNSGE	337
human UL78	363	SSRCYADATSAAVV	VTTTSEKATLVEHAEG	393
rhesus UL78	338	RANLPENAEEDIGTTGS	DQLPTEVTVPNSSA	368
human UL78	394	MASEMCPGTTI	DVSAE SSSVLC TDGENTVAS	424
rhesus UL78	369	VFSTGGTVSPV		379
human UL78	425	DATVTA L		431

FIG. 3

Binding of Fractalkine to HCMV Virions

* Toledo
 * Tol deltaUS28



Cold Fractalkine (nM)

FIG. 5

**Fractalkine Homologous Competition
on Rh-CMV Infected Fibroblasts**

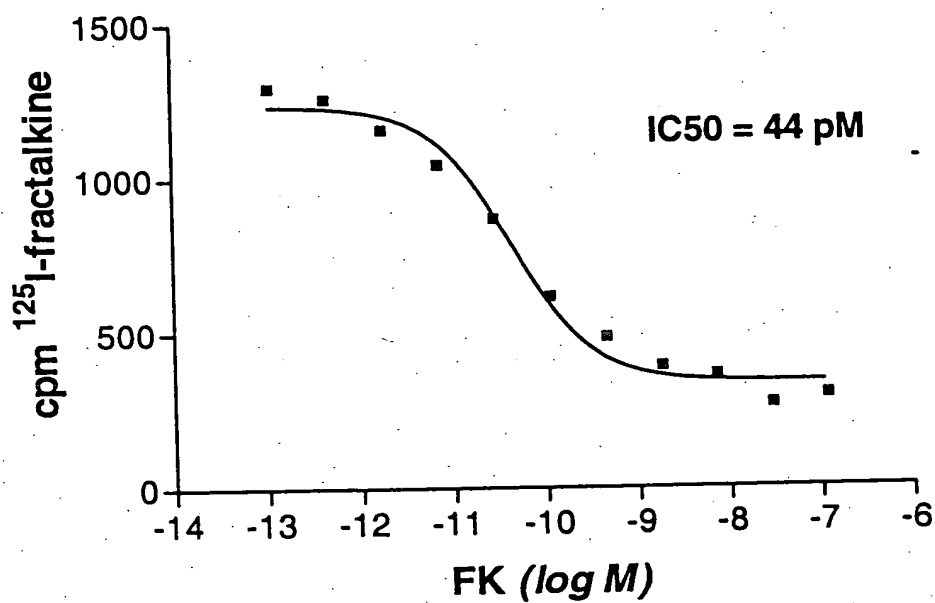


FIG. 6

Sucrose Virions/CX3C binding

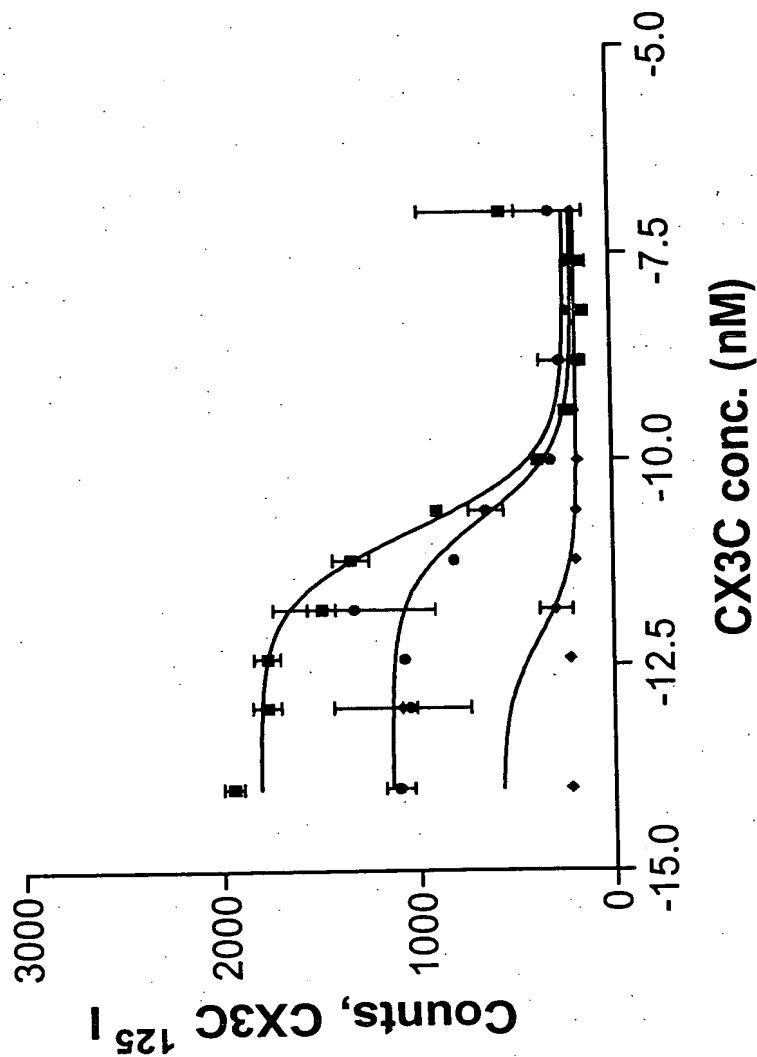


FIG. 7